DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003326 Address: 333 Burma Road **Date Inspected:** 23-Jul-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Keng Chan **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing Island, China for the purpose of observing and monitoring the fabrication of the OBG/Tower.

Bay 4

The Quality Assurance Inspector observed ZPMC in process of performing fit up operations on the 43 meter elevation double diaphragm plate assembly.

The Quality Assurance Inspector observed ZPMC in process of performing grinding and carbon air arc gouging various weld runoff tabs on various tower diaphragm plates to flange assemblies.

Bay 7

Floor Beam Sub Assembly

The Quality Assurance Inspector observed ZPMC welder 044774, utilizing the flux core metal arc welding process on partial joint penetration weld number FB-024-001-148. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2232-T-4G-F.

The Quality Assurance Inspector observed ZPMC welder 06687, utilizing the submerged arc welding process on partial joint penetration weld number FB-024-001-58. The Quality Assurance Inspector observed ZPMC Quality

WELDING INSPECTION REPORT

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Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2232-TC-U4B-F.

The Quality Assurance Inspector observed ZPMC personnel in process of chalking layout lines on floor beam sub assembly FB33A in an effort to aid in the fit up of the stiffeners to floor beam.

The Quality Assurance Inspector observed ZPMC in process of performing grinding and carbon air arc gouging operations various floor beam sub assemblies and bottom panels.

Bay 8

Floor Beam Sub Assembly

The Quality Assurance Inspector observed ZPMC welder 050323, utilizing the submerged arc welding process on complete joint penetration weld number FB-088-002-015. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2221-B-L2C-5-2.

The Quality Assurance Inspector observed ZPMC in process of performing grinding and carbon air arc gouging various weld runoff tabs on various tower diaphragm plates to flange assemblies.

Ultrasonic Testing

The Quality Assurance Inspector performed 10% random ultrasonic testing verification on floor beam sub assembly. The Quality Assurance Inspector performed the testing on the following welds; FB059-001-001,006, FB059-002-001,006, FB059-003-001,006, FB059-004-001,006, FB059-005-001,006, FB059-001-001,006, FB060-001-001,006, FB060-002-001,006, FB062-001-001,006, FB061-001-001,006, and FB061-002-001,006 See Caltrans report TL-6027 Ultrasonic Testing Report, dated July 23, 2008 for additional information.





Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials

WELDING INSPECTION REPORT

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for your project.

Inspected By: Lara, Raymond Quality Assurance Inspector

Reviewed By: Lanz,Joe QA Reviewer